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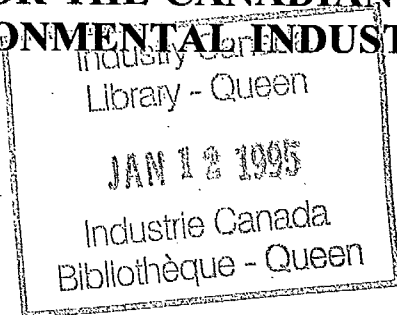
A STRATEGY FOR THE CANADIAN ENVIRONMENTAL INDUSTRY

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**A STRATEGY
FOR THE CANADIAN
ENVIRONMENTAL INDUSTRY**



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EXECUTIVE SUMMARY

The Government of Canada recognizes the importance of a world-class environmental industry and is committed to aggressively promoting this sector. An effective sustainable development policy which fully integrates the resolution of environmental concerns with sound economic goals relies upon a strong domestic environmental industry.

This crucial link was underscored in the Liberal Plan for Canada:

A dynamic domestic environmental industry can offer Canada new business opportunities, value-added exports and high-calibre jobs while directly tackling environmental challenges... Canada needs a guiding vision to develop our "green" industries.

As a significant step toward providing and elaborating this vision and realizing its potential, the government has introduced the Environmental Industry Strategy. This package of complementary, cost-effective initiatives was developed after months of dialogue and consultation with the industry, associations, provincial governments and other stakeholders. Recognizing that resources are limited and greater value for money is necessary, the Strategy emphasizes a strengthened cooperative effort among stakeholders and builds on a variety of existing federal and provincial government initiatives.

The Environmental Industry Strategy consists of three principal components:

- a core Strategy containing 22 initiatives involving \$57.5 million of new and redirected funding

EXECUTIVE SUMMARY

- the continuing programs and activities of a number of federal departments and regional agencies
- new initiatives that will be developed by federal government departments and agencies which already provide support to the environmental industry.

As part of the broader Environmental Industry Strategy, the core Strategy constitutes a package of new, cost-effective initiatives to complement efforts currently under way by a number of federal departments and agencies. A number of these new initiatives have little or no cost associated with them. The three key elements of the core Strategy involve:

- delivering federal government support to the industry in a direct, easily accessible, service-oriented and cost-effective way
- supporting the promising development and commercialization of innovative environmental technologies
- improving access to domestic and global market opportunities for environmental companies.

To support the improved delivery of federal government programs and services, the core Strategy calls for the establishment of a focal point for government programs, activities and knowledge. Representatives from both levels of government as well as environmental industry associations will work together to deliver a full array of programs and services and to ensure their optimal, efficient delivery. In addition, a forum of federal and provincial Ministers of Industry and Environment will be held to discuss the implementation of the Strategy and to begin the process of harmonizing programs. Improving government procurement of environmental products and services will also be discussed during the forum.

Ensuring the continuing development and commercialization of innovative environmental technologies will be facilitated through a number of initiatives. The Environmental Technology Development and Demonstration Initiative will provide support to commercialization and technological demonstrations in priority areas of pollution prevention such as water and wastewater treatment, clean air, waste management, spill prevention, energy efficiency, "clean car" technology and alternative transportation.

Under the *Networks of Centres of Excellence* Phase II program, the environment is identified as one of five target areas in a *competition* for creating new Networks of Centres of Excellence. This program supports leading-edge research of strategic economic importance in order to create new economic opportunities.

An initiative to assist Canadian firms to demonstrate their environmental technologies will provide a springboard for first-time entry into attractive markets. The government has also committed funding to explore options to provide national certification of products and services. The domestic market for the environmental industry will be further stimulated through an initiative to establish partnerships to design and implement training programs for Canadian businesses in order to identify and address environmental problems. Promoting energy and water efficiency, waste reduction and pollution prevention will be the focus of these training programs.

Many firms within the environmental industry have developed innovative products and services that are in demand at home and abroad, but require assistance in gaining access to markets. The core Strategy contains a number of initiatives designed to increase the ability of Canadian firms to access international markets by improving the availability and quality of information on: international markets; funding opportunities from international agencies such as United Nations organizations and the World Bank;

business opportunities resulting from global, multilateral and bilateral agreements; and Canadian firms looking to build strategic alliances and consortia to target attractive export markets. The Strategy calls for the transfer of environmental expertise from Canada to facilitate improved export opportunities while assisting developing countries in building their environmental management capacity. One specific initiative will improve training for Canadian Embassy staff on the growing capabilities of the Canadian environmental industry to help to increase its presence in selected international markets.

The government will develop a federal environmental procurement framework to promote the growth of the domestic market and improve its environmental performance. In addition, it will examine and present options to strengthen the industry's participation in Canada's development assistance programs.

A cornerstone of the Environmental Industry Strategy is the active involvement of the Canadian environmental industry itself, a key partner in the implementation of the Strategy. Partnerships between government and industry will be supported by:

- strengthening environmental industry association chapters
- ensuring that the environmental industry is represented on environmental advisory committees with the immediate invitation to have the industry as a full member of the federal Advisory Committee on Environmental Protection
- establishing a government-industry Sector Advisory Group on International Trade to review policies and priorities and make specific recommendations to help Canadian firms win significant export contracts.

To ensure the successful implementation of the Strategy, Industry Canada and Environment Canada will co-chair a steering committee, to be comprised of representatives from key federal departments and agencies, and one representative each from: the Canadian Environmental Industry Association, the Canadian Council for Human Resources in the Environment Industry, the Canadian Council of Ministers of the Environment, and the National Environmental Technology Advancement Centres. Annual reports on the progress of the core Strategy will be presented to the Ministers of Industry and Environment, beginning with the 1994-95 fiscal year. Implementation of the Steering Committee will entail no incremental cost to the Environmental Industry Strategy.

The core component of the Environmental Industry Strategy focuses on 22 key initiatives and the central roles that Industry Canada, Environment Canada and the Canadian environmental industry will play in its implementation. Of equal importance, however, are the complementary programs and activities of a number of other federal departments and agencies that collectively make significant contributions to the growth and success of the industry. Together these programs and activities, as well as further initiatives to be developed, will expand and considerably enhance the overall effectiveness of this core Strategy.

The Canadian environmental industry is a dynamic, knowledge-intensive sector which has a vital role to play in enhancing wealth creation and helping Canadians make significant progress towards sustainable development. The Environmental Industry Strategy establishes a vision for this sector. Recognizing that resources are limited and significant progress has already been made in the environmental industry, the Environmental Industry Strategy provides a comprehensive framework to establish, through a wide variety of strengthened partnerships, a cleaner environment and an internationally competitive environmental industry in Canada.

THE ENVIRONMENTAL INDUSTRY AND ITS MARKETS

Canada is already highly regarded internationally for its knowledge and expertise in many niche areas within the environmental industry. This environmental industry strategy builds on the lessons of these successes to help broaden our strength and reputation so that Canadian environmental firms flourish within domestic and international markets. It will promote environmental improvements, create valuable knowledge-based jobs, and expand domestic and export markets for the industry. In addition to these direct benefits, more traditional industries which will be able to take advantage of an enlarged range of Canadian environmental technologies, services and products will increasingly find that their profitability and competitiveness is enhanced as well.

The Canadian environmental industry is comprised of 4 500 small and medium-sized enterprises which provide technologies, processes, products and services which address environmental problems. Although the industry is less than a decade old, these firms employ approximately 150 000 people.

About two-thirds of environmental industry firms provide services ranging from hazardous waste transportation, storage and treatment to environmental engineering, energy conservation, and water, soil and air quality testing. These firms generate approximately \$5 billion in revenues annually.

The other third of the firms are in manufacturing, which covers a broad range of products from clean process technologies and portable site remediation equipment to environmentally responsible consumer goods. The manufacturing component has yearly revenues of about \$6 billion.

The size of the firms within the industry varies from one person consulting firms to large multinational corporations but is generally comprised of small and medium-sized enterprises, most employing fewer than 50 people.

The growth of Canada's environmental industry is the result of a number of factors which include: an evolving regulatory framework; the rapid growth in international markets for environmental goods and services; growing awareness by industry and government of the many benefits of improved environmental performance such as increased levels of efficiency; and increased public demand for environmentally responsible consumer goods.

The Domestic and International Markets

Canada's domestic market for environmental goods and services is approximately \$11 billion and is expected to grow at 10 percent annually to \$22 billion by the year 2000. The increase in market demand is largely the result of efforts on behalf of industry and all levels of government to improve their environmental performance.

Canadian firms must increasingly compete for domestic markets with foreign firms, many of which are well entrenched in certain segments of the Canadian market. The North American Free Trade Agreement promises to integrate many aspects of the Canadian, American and Mexican markets for environmental goods and services, opening up new opportunities for Canadian firms.

Canada's share of the world market (3.5 percent) for environmental products and services is growing and our potential for a much larger share of this market is great. Between 15 and 20 percent of Canadian environmental industry companies either are exporting or export-ready. Currently the primary market for Canadian exports of environmental goods and services is the

United States, which accounts for 80 percent of the total \$1 billion in exports.

Many Canadian firms have established an excellent reputation for water and wastewater treatment systems, for handling liquid and solid wastes and providing products such as incinerators, shredders, compactors and recycling equipment. While 23 percent of manufacturing in the industry is exported, it is estimated that 37 percent of the Canadian market for environmental equipment is imported and that Canada has a net trade deficit in this area of \$900 million.

The world market for the environmental industry is growing rapidly and may reach as much as \$600 billion by the year 2000. By that time, the U.S. market is expected to reach \$200 billion. International environmental agreements, emerging industrialized nations with new environmental regulations, and a growing emphasis on the environment among international institutions are helping to fuel this burgeoning international demand for environmental goods and services.

A number of newly industrialized countries have asked for Canada's help in designing and developing their domestic environmental laws, regulations and compliance administration regimes. The fastest growing markets during the next five years — on average 15 percent a year — are expected to be the industrialized nations of Latin America, Southeast Asia, the Pacific Rim, and central and eastern Europe. China alone is expected to spend \$35 billion in environmental goods and services over the next six years.

The growing world market holds much promise for many Canadian firms but too often they may lack the necessary resources to establish a presence overseas, or are simply unaware of the opportunities which exist. The core Strategy is made up of a package of new, cost-effective initiatives to complement efforts currently under way by a number of federal departments and agencies. These initiatives will improve the level of support to Canadian firms so they may increase their share of both the domestic and export markets.

THE CONSULTATIVE PROCESS

The core Environmental Industry Strategy was developed in direct response to many of the issues raised during an extensive consultative process undertaken and sponsored by Industry Canada and Environment Canada in January and February 1994 with the full participation of the industry, associations, provincial governments, and many other stakeholders. A comprehensive consultation paper titled *"Environmental Industry Strategy for Canada"* was distributed to guide the consultative process. Six workshops organized by the Canadian Environmental Industry Association were held in cities in Atlantic Canada, Quebec, Ontario, Manitoba, Alberta and British Columbia. The consultation paper described the principal issues confronting the environmental industry in Canada focusing on four areas: domestic and international markets, technology, financing and human resources.

The paper outlined a wide range of challenges and potential initiatives for discussion. Over 700 individuals participated in the day-long workshops. Workshop participants included industry representatives (50 percent), user industries, municipal governments, public utilities, research and development and university organizations (30 percent) and federal and provincial government officials (20 percent). Over 6 000 copies of the consultation paper were distributed and numerous written submissions received.

The consultative process was successful in drawing out a considerable number of innovative and practical recommendations for the Strategy. Key issues emerging from the workshops and written submissions were a desire for more domestic and export market information, standards or certification for products and services, the harmonization of Canadian regulations, "green" procurement standards and practices for the federal government, and support for technology demonstration.

A number of workshop delegates agreed that, given existing fiscal constraints, the government should not consider expensive new add-on programs for proposed initiatives but rather should improve the delivery of existing services.

Participants also indicated the need for more skilled workers and suggested that greater links be established between educational institutions and the environmental industry to ensure that training better reflects industry needs.

Participants recommended the need for a greater level of federal and provincial cooperation in support of the industry. The need to establish an Environmental Industry Strategy to complement existing government support programs and activities for the environmental industry was emphasized. Indeed, the consultative process was instrumental in establishing the foundation for a process that brings together federal government actions, policies and plans with those of provincial governments and the private sector.

Within the federal government, 14 departments and agencies were involved in developing the initiatives in support of the environmental industry as well as developing the core Environmental Industry Strategy. The core Strategy strongly reflects the stakeholder input obtained during the consultations.

THE ENVIRONMENTAL INDUSTRY STRATEGY

The Environmental Industry Strategy was first sketched out by the Prime Minister during the election campaign and elaborated in the Red Book. The Strategy recognizes that much work has already been done and significant progress made in positioning the Canadian industry for serving both domestic and world markets. It also recognizes that resources are limited, a reality highlighted by workshop participants who emphasized that a cooperative effort and greater value for money was needed more than additional funding.

The Environmental Industry Strategy consists of three principal components:

- a core Strategy containing 22 initiatives involving \$57.5 million of new and redirected funding
- the continuing programs and activities of a number of federal departments and regional agencies
- new initiatives that will be developed by federal government departments and agencies which already provide support to the environmental industry.

The government's vision of a world-class environmental industry will be realized by improving the industry's access to government programs and services, enabling technology development and commercialization, and assisting the industry to secure a dominant presence in both the Canadian and global market.

The three key elements of the core Strategy involve:

- delivering federal government support to the industry in a direct, easily accessible, service-oriented and cost-effective way

ENVIRONMENTAL INDUSTRY STRATEGY

- supporting the promising development and commercialization of innovative environmental technologies
- improving access to domestic and global market opportunities for environmental companies.

The core Strategy, ongoing government programs and activities, as well as further initiatives will help to strengthen Canada's environmental industry. Implementation of the Strategy through a variety of partnerships will lead to positive environmental and economic benefits for all Canadians. Described in greater detail, the Strategy addresses many of the fundamental concerns raised throughout the consultative process, while recognizing the strengths of existing programs and activities and the need for more coordinated effort within and among governments to support this key sector.

COMPONENTS OF CANADA'S CORE ENVIRONMENTAL INDUSTRY STRATEGY

Delivering Federal Government Support to the Industry in a Direct, Easily Accessible, Service-oriented and Cost-effective Way

Initiative 1: Simplified Access to Government Services

A focal point for government programs, activities, service and knowledge will be established on a province-by-province basis, where appropriate. Through this "hub" concept, a full range of support services for firms will be provided.

Representatives from federal departments, provincial governments, industry associations, and National Environmental Technology Advancement Centres will be partners in this hub. Partners will continue to retain their autonomous identities but working through a focal point to be in a better position to offer programs and services more effectively and efficiently.

Initiative 2: Forum of Federal-Provincial Ministers of Industry and Environment

A forum of federal-provincial Ministers of Industry and Environment will be held to discuss implementation of the Environmental Industry Strategy. At no incremental cost to the Strategy, this forum will begin the process of harmonizing programs since most provincial governments are developing, or have instituted, programs in support of the environmental industry. Improving government procurement of environmental products and services will also be discussed. The Government of Nova Scotia has offered to host this forum.

Supporting the Promising Development and Commercialization of Innovative Environmental Technologies

Initiative 3: Environmental Technology Development and Demonstration Initiative

Canada, as a world leader in environmental protection, is moving toward pollution prevention processes and technologies. This initiative will direct support to commercialization and technological demonstrations in priority areas such as water and wastewater treatment, clean air, waste management, spill prevention, energy efficiency, "clean car" technology and alternative transportation. It will give priority to pollution prevention technologies and processes and encourage companies to exceed environmental standards and guidelines.

Under the *Networks of Centres of Excellence* Phase II program, the environment is identified as one of five target areas in a *competition* for creating new Networks of Centres of Excellence. The Phase II program supports leading-edge research of strategic economic importance to Canada to create new economic opportunities.

Initiative 4: Demonstrating Canadian Technology for the International Market

This initiative will assist Canadian firms to demonstrate their environmental technologies, providing a springboard for first-time market entry into attractive global markets. Developing countries and emerging economies will be among the beneficiaries of the use of made-in-Canada manufacturing and resource processing which employ clean processes and product technologies.

Initiative 5: Examination of the Certification of Products, Processes, and Services

During the consultations, the national certification of environmental products, processes and services was identified as an important factor in succeeding in domestic and export markets. The government, in partnership with the private sector, will examine options that would enable firms to compete more effectively at home and abroad through certification.

Initiative 6: Domestic Market Development through Assistance for Small and Medium-sized Enterprises to Improve Environmental Performance

This initiative is designed to augment the domestic market for environmental goods and services by assisting small and medium-sized Canadian enterprises on how to improve their environmental performance. A program will be developed, in possible partnership with such organizations as the Canadian Manufacturers Association, the Canadian Standards Association, the Canadian Chamber of Commerce and the Canadian Environmental Industry Association, to promote pollution prevention, waste reduction, recycling, and energy efficiency among these smaller Canadian firms. In addition to improving the domestic market, these companies stand to increase their profitability and competitiveness through improved environmental performance.

Improving Access to Domestic and Global Environmental Markets for Canadian Companies

Initiative 7: Improved Access to Business Opportunities through International Agreements and Institutions

Numerous opportunities arise from global environmental conventions, Canada's bilateral and multilateral agreements and through the work of international institutions such as the World Bank and the United Nations organizations. Canadian companies will be informed regularly about new international business opportunities and provided with assistance in gaining international sources of financing for projects. Action plans will be developed for individual conventions to identify specific initiatives involving the environmental industry. A major focus will be on projects with the potential for financing from the World Bank and other international financial institutions.

Initiative 8: Establishing a National Statistical Database

Industry representatives have identified the need for a statistical database on the environmental industry sector. The lack of comprehensive information on the industry is seen as a significant obstacle to growth and benchmarking. Better statistics would also assist governments in future policy development.

Drawing on the cooperation of environmental industry stakeholders, a statistical database will be created and maintained to meet this challenge.

Initiative 9: Supporting Strategic Alliances for Export Markets

This initiative involves supporting the creation of strategic alliances and consortia between Canadian companies to penetrate global markets. The size of the majority of Canadian environmental companies, many with fewer than 50 employees, makes successful competition in world markets difficult. At the same time, many of these companies possess innovative and imaginative technologies and expertise that are in demand abroad. This initiative will help companies to combine their capabilities and resources in accessing export markets and assist them in identifying and developing joint responses to business opportunities to improve their competitive position and chance of success.

Initiative 10: Enhancing Environmental Market Intelligence

This initiative will help Canadian firms improve their assessment of domestic and international marketing opportunities. Strategy activities, building on existing initiatives, will involve:

- collecting and analysing strategic information on both domestic and global markets
- identifying and monitoring environmental trends, policies, and initiatives to alert companies to emerging market opportunities
- identifying key technologies, products and services which could have immediate applications, and marketing Canadian expertise aggressively in these areas
- providing marketing workshops focusing on specific markets
- communicating environmental market information to Canadian companies on a regular basis.

Initiative 11: Promoting Exports through the International Transfer of Environmental Expertise

Helping to promote Canada's environmental industry by encouraging the government-to-government transfer of expertise on environmental management infrastructure is the primary objective of this initiative. Canada's wealth of expertise relating to regulations, policies and technical programs in the public and private sectors will be utilized, with the participation of educational institutions, to support the export of Canadian products and services. The initiative will at the same time contribute solidly to the environmental management capacity of developing countries.

Initiative 12: Environmental Industry Expertise in Embassies and International Organizations

Knowledge of key niche markets within the Canadian environmental industry will be enhanced through increased training for trade commissioners and Canadian representatives to international organizations in order that they may be better equipped to promote Canadian expertise and products.

Initiative 13: Federal Government Commitment to Green Procurement

The federal government is the nation's largest commercial landlord and purchases more than \$9 billion annually in consumer, commercial and industrial goods. Through its procurement purchases it acts as a strong lever for remediation and restoration work and offers significant opportunities to help develop Canada's domestic market for environmental goods and services.

The cornerstone of this initiative is the Code of Environmental Stewardship which commits the federal government to conduct all

of its operations in an environmentally responsible manner. To accelerate departmental action, a federal environmental procurement framework will be implemented. It will include:

- reporting publicly on the results of green procurement, based on annual departmental reports
- reviewing and revising government procurement systems, catalogues and directories to ensure that adequate environmental information is provided to help procurement officers select environmentally sound products
- providing training to procurement staff
- scheduling workshops/trade shows at various regional centres to expose procurement officers to the environmental industries products and services
- focusing the effort of the Environmental Choice Program on product categories most frequently purchased by federal agencies
- providing existing product directories on-line to assist procurement officers to identify sources for environmentally responsible products.

Initiative 14: Government Practices Review

As part of the review of federal spending on science and technology announced in the 1994-95 Budget, this initiative involves a review of federal government practices which are considered harmful to the viability of environmental companies, and the supporting policies which may create this situation. The review comprises no cost to the Environmental Industry Strategy.

Initiative 15: Enhancing the "Going Green" Building Program

At no incremental cost to the Strategy, this initiative involves the enhancement of an existing Public Works and Government Services Canada program. The program implements, in collaboration with the private sector, a "Going Green" program linked to the Federal Building Initiative. Enhancing the "Going Green" Building program will help to improve the domestic market for environmental products and services by promoting the use of innovative technologies and processes for existing and new federal facilities while at the same time enhancing environmental management practices within the federal government.

Initiative 16: Strengthening Participation in Development Assistance Programs

Government departments will examine and present options to strengthen the participation of environmental companies in Canadian development assistance programs, within the context of foreign policy objectives as established by the Foreign Policy Review. The initiative involves no incremental cost to the Strategy.

Initiative 17: Increasing Awareness of Federal Export Support

Canadian companies can benefit from increased awareness of the services of the Canadian Commercial Corporation and other export financing organizations. Requiring no additional capital outlay, these institutions will work in partnership with environmental firms, providing assistance at all phases of international procurement, including help with bidding, negotiating contracts, securing beneficial payment terms and contract management.

Initiative 18: Enhancing the Involvement of Members of Parliament

At no incremental cost to the Strategy, this initiative will entail devising a suitable mechanism to more fully involve members of Parliament in the activities related to international gatherings and missions. The enhanced involvement of Members of Parliament will serve to confirm the commitment of the Government of Canada to the Strategy.

Partnership with the Canadian Environmental Industry

A cornerstone of the Environmental Industry Strategy is the active involvement of the Canadian environmental industry itself, a key stakeholder and partner in the implementation of this core Strategy. Four actions will be taken to this effect, two of which have no costs attached.

Initiative 19: Establishing an Implementation Steering Committee

A steering committee to implement the core Strategy and report annually upon its progress to the Ministers of Industry and Environment will be established. The committee will include representatives from federal departments and regional agencies, as well as one representative from each of: the Canadian Environmental Industry Association, the Canadian Council of Ministers of the Environment, the Canadian Council for Human Resources in the Environment Industry, and the National Environmental Technology Advancement Centres.

Initiative 20: Establishing a Sector Advisory Group for International Trade

A Sector Advisory Group for International Trade (SAGIT) will be established to review policies and priorities and make specific recommendations to help Canadian firms win significant export contracts in targeted global markets.

Initiative 21: Representation on Environmental Advisory Committees

To ensure the environmental industry is represented on environmental protection advisory committees, a representative of the environmental industry will be invited to be a full member of the federal Advisory Committee on Environmental Protection.

Initiative 22: Strengthening Chapters of Environmental Industry Associations

Chapters of environmental industry associations will be strengthened to enable them to represent their member companies more effectively.

This broad range of 22 initiatives and the partnership of the environmental industry constitutes the core Environmental Industry Strategy. It will complement and help to focus existing programs and further initiatives in support of the environmental industry provided by a number of federal departments and regional agencies, as described in the following pages.

BEYOND THE CORE STRATEGY — OTHER PARTICIPANTS

The previous sections of this booklet have highlighted key initiatives that make up the core Environmental Industry Strategy and the central roles that Industry Canada and Environment Canada, and particularly the Canadian environmental industry itself, will play in implementing this core Strategy. In addition, the programs and activities of a number of other federal departments and regional agencies make significant contributions to the growth and success of the Canadian environmental industry. These programs and activities will complement the core Strategy and enhance its overall effectiveness. A brief description of the nature and positive impact that some of these departments and agencies will have in supporting and expanding the core Strategy follow.

Natural Resources Canada (NRCan)

One of Natural Resources Canada's prime responsibilities is to point the way toward the responsible development and use of our mineral, energy and forest resources. To help fulfil this responsibility, the department has in place a package of long-term science and technology programs designed to spur the development and broaden the use of improved resource technologies.

NRCan plays an important catalytic role, utilizing its technical, scientific and financial resources to create programs that address environmental concerns associated with the development of natural resources. Much of the success of these programs is attributable to NRCan's partnership approach, which allows resource industries, other federal and provincial government departments and environmental companies to work together at optimum efficiency. For Canadian environmental companies the partnership approach has accelerated product development and opened up countless marketing opportunities at home and abroad.

National Research Council Canada (NRC)

The National Research Council invests in research, related support activities and facilities that directly support Canada's environmental industry. These resources provide an ongoing research and development infrastructure that is accessible by industry. To this is attached a broad array of technical expertise and industrial technology advisory capacity through several NRC institutes as well as the Industrial Research and Assistance Program (IRAP) network.

NRC's Environmental Technology Strategy will focus on collaborating with Canadian firms and consortia to develop and demonstrate industrial leadership in key global environmental niches. NRC consortia and projects will take into account the need for industry to move aggressively into cleaner process and product technologies as well as the growing emphasis on sustainable development.

Human Resources Development Canada (HRDC)

Through its sectoral activities initiatives, Human Resources Development Canada is supporting the establishment of the Canadian Council for Human Resources in the Environment Industry (CCHREI).

The CCHREI is an industry-initiated, not-for-profit Canadian corporation with a mission "to ensure an adequate supply of people with the appropriate skills and knowledge to meet the environmental needs of the public and private sectors." The CCHREI is a permanent, national body which will enable partners in the environmental industry, labour, educators, government departments, government sponsored agencies and non-governmental organizations to work together on the industry's critical human resources issues.

**Department of Foreign Affairs and International Trade
(DFAIT)**

The global presence and stature of DFAIT enables this department to provide valuable assistance to the Canadian environmental industry. Among its directly related activities are:

- preparing export capability guides/directories to identify and promote Canadian environmental products, services and technologies, as Phase I of its International Opportunities Canada Program (IOC)
- preparing global market opportunity reports through cooperative information and intelligence sharing as Phase II of IOC
- identifying and exploiting international market opportunities through targeted trade shows, missions and other exchanges:
 - this is Phase III of the IOC and is factored into Canada's International Trade Business Plan
- facilitating strategic market planning for guiding trade, technology transfer and partnerships:
 - this includes pursuing projects supported by international financial institutions (IFI's); improving access and packaging of financial tools and enhanced industry participation in projects and activities funded by IFI's and donor agencies; and taking full positive advantage of international environmental protocols supported by Canada.

In the spirit of Agenda 21, Canada recently announced its intention to host a regional meeting of experts under the auspices of the Organization of American States on environmentally sound technologies. The Department of Foreign Affairs and International Trade, with principal responsibility for the facilitation and guidance

of trade and technology transfer initiatives, will host this event in cooperation with other departments.

Canadian International Development Agency (CIDA)

Environmental programming is a priority area for the Canadian International Development Agency. CIDA's ongoing bilateral programs support efforts to improve environmental and natural resource management in many developing countries in Asia, Africa and the Americas.

CIDA has two environmental programs specifically directed to its Canadian partners: the Environment and Development Support Program with environmental non-governmental organizations, and the Environment Technology Cooperation Initiative involving the private sector in responding to opportunities to develop joint ventures in developing countries.

As well, CIDA's Environmental Trust Fund at the World Bank has created new opportunities for Canadian expertise, as has CIDA's contribution to the Association of Consulting Engineers of Canada, which provides co-financing with Canada's private sector and helps place environmental and other Canadian experts in the World Bank.

Western Economic Diversification (WD)

The environmental industry is one of western Canada's fastest-growing sectors. Western environmental industry annual sales (\$2B) and employment (20 000) are expected to double by the year 2000 if companies maintain their domestic market share and continue to penetrate world markets (\$600B). Increasing the growth rate and market share of the western environmental industry will create new knowledge-based jobs, generate significant export revenue, displace imports and support progress toward sustainable development.

The four western environmental industry associations recently signed a "Memorandum of Understanding" to establish the "Western Environmental Industry Network." This industry-led Network, representing a strategic alliance of over 550 environmental companies, will work in partnership with government, institutional supporters and other key stakeholders to coordinate industry/government activities in all four western provinces, communicate regional views, interests and concerns, and identify and pursue activities important to the western Canadian industry. The establishment of the Network is a significant step towards coordinated action on the challenges and opportunities facing the western environmental industry.

Western provinces have encouraged and supported the formation of the western Network and development of a comprehensive strategy for the environmental industry.

Atlantic Canada Opportunities Agency (ACOA)

The Atlantic Canada Opportunities Agency has actively supported the development of the environmental industry and will continue to respond to the needs of this sector through its existing programs and innovation activities. It will use a coordinated, collaborative approach with other federal government departments, the provinces and other partners in the region to achieve the goals and objectives of the Environmental Industry Strategy.

ACOA will also look for opportunities in other federal initiatives such as the business networking and procurement related to the sector. In addition, through its role as managing partner of the Atlantic Canada Business Service Centres, it will develop ways of meeting the needs and aspirations of the environmental industry in a manner consistent with and supportive of the core Strategy.

Federal Office of Regional Development/Quebec (FORDQ)

The Federal Office of Regional Development/Quebec is responsible for a series of activities which serve to strengthen the environmental industry in Quebec. These include:

- fostering strategic alliances among the various environmental industry stakeholders through networking of small and medium-sized enterprises and industrial associations, strengthening of existing and new partnerships, and improving access to government programs
- providing support through regular programs for research and development for environmental technology, demonstration, marketing and transfer projects
- encouraging the establishment and development of small and medium-sized enterprises in the environmental sector
- supporting sector initiatives that contribute to making Montreal an industrial centre of excellence in the environment
- helping small and medium-sized enterprises gain access to the federal procurement process
- assisting young entrepreneurs by encouraging training and education that focuses on business management
- helping small and medium-sized enterprises develop export markets through cooperative efforts with Industry Canada and the Department of Foreign Affairs and International Trade.

CONCLUSION

A dynamic and vibrant environmental industry is an important key to the future prosperity of Canada's economy and a clean environment. The Environmental Industry Strategy is an important step in ensuring that Canada's industry will thrive in the rapidly growing domestic and international markets for its goods and services. The Strategy is designed to meet the needs of the industry by improving government service delivery, promoting the development and commercialization of environmental technologies, and increasing access to domestic and international market opportunities in a cost effective and efficient manner.

To ensure the successful implementation of the Strategy, Industry Canada and Environment Canada will establish and co-chair a steering committee, to be comprised of representatives from key federal departments and agencies, and one representative from each of the Canadian Environmental Industry Association, the Canadian Council for Human Resources in the Environment Industry, the Canadian Council of Ministers of the Environment, and the National Environmental Technology Advancement Centres. Annual reports on the progress of the core strategy will be presented to the Ministers of Industry and Environment beginning with the 1994-95 fiscal year.

Industry, government, academia, research institutions and other interested stakeholders will work together through a broad range of partnerships to forge the development of this key knowledge-intensive sector. The environmental industry is not only a source of important job creation and environmental protection, it also provides the technology, services and expertise which allow Canadian businesses to improve their competitiveness in an increasingly integrated global economy.

The Environmental Industry Strategy establishes a vision and a comprehensive framework to help the environmental industry increase its contribution to a strong economy and a clean environment for all Canadians.

